

ABSTRACT

A low-cost, flexible, high performance system and method comprises a means for interfacing a code division wireless system to a fast packet switched network for transmission over a core network to a destination terminal user via a destination access node and a destination access radio port. The method is for code division switching at an originating terminal, the originating terminal being located within a microport cell of a terrestrial wireless network at a given instant in time, where said network interfaces with an access radio port, and comprises the steps of spreading a transmission signal by a PN-code assigned to an intended receiving port, inserting an identifier of a few bits for identifying a user, spreading a payload data signal by an orthogonal code, spreading the orthogonal spread payload data signal by the PN-code associating the user with payload data, modulating the PN-code spread transmission signal and the twice spread payload data signal, and forwarding the modulated PN-code spread transmission signal and the modulated twice spread payload data signal to an access radio port. The code division switching system at an originating terminal, the originating terminal being located within a microport cell of a terrestrial wireless network at a given instant in time, where said network interfaces with an access radio port, comprise a first spreader for spreading a transmission signal by a PN-code assigned to an intended receiving port, a second spreader for spreading a payload data signal by an orthogonal code assigned to a receiving terminal user to which the payload data signal is directed, the payload data signal being further spread by the first spreader, a means for forwarding the PN-code spread transmission signal to an access radio port and a means for forwarding the twice spread transmission signal to an access radio port, is described.